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TENNESSEE VALLEY AUTHORITY FINDING OF NO SIGNIFICANT IMPACT

STATE ROUTE 36 IMPROVEMENTS

TENNESSEE DEPARTMENT OF TRANSPORTATION - SECTION 26a APPROVALS ON KNOB, CARROLL, BOONES, AND OTHER TRIBUTARIES TO SOUTH FORK HOLSTON AND WATAUGA RIVERS (BOONE AND FORT PATRICK HENRY RESERVOIRS) FOR PROPOSED WIDENING OF STATE ROUTE 36 FROM STATE ROUTE 381 TO INTERSTATE 81 IN WASHINGTON AND SULLIVAN COUNTIES, TENNESSEE - ADOPTION OF THE ENVIRONMENTAL ASSESSMENT (EA) PREPARED BY THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) AND FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Proposed Action and Need

The Federal Highway Administration (FHWA) and Tennessee Department of Transportation (TDOT) have completed an environmental assessment (EA) for the improvements and widening of State Route (SR) 36 from SR 381 in Johnson City in Washington County, Tennessee to Interstate 81 near Kingsport in Sullivan County, Tennessee. The entire project is approximately 9.95 miles in total length and would require acquisition of approximately 17.8 acres of new right-of-way. The existing 2-lane highway has either narrow or no roadside shoulders and has structural and geometric deficiencies. TDOT would construct four 12-foot wide traffic lanes and a 12-foot wide continuous center turn lane along its existing alignment. Highway improvements would also include curbs and gutters with shoulders; as well as a sidewalk and multiple-use path (bike lanes) along its west side. These improvements are needed to provide adequate roadway capacity and safety to meet future traffic demands (see attached EA).

Tennessee Valley Authority (TVA) has been asked to review a 3.0-mile section, the southernmost phase, of the 9.95-mile project for required approvals under Section 26a of the TVA Act. This southernmost project phase includes proposed improvements and widening of SR 36 from SR 381 in Johnson City to SR 354 just north of Boones Creek. No TVA land or land rights are involved. A joint permit application, dated January 13, 2004, was submitted by TDOT to TVA and the United States Army Corps of Engineers (USACE) for this 3.0-mile section. This southernmost portion of the project would involve replacement or extension of 6 culverts affecting Knob creek and its tributaries. A 0.7-acre wetland is located east of SR 36 near its intersection with Mountainview Road. About 0.1-acre of this wetland would be permanently affected. Two (2) bridges, one each over Boones and Carroll Creeks, would require widening. Approximately 20 feet of riprap would be needed in the floodplain to stabilize stream banks and wet-weather conveyance drainages.

At this time, TVA proposes to approve construction of SR 36 improvements for only this southernmost 3.0-mile phase from SR 381 to SR 354. TVA has not received application for approval of any other section or sections of this project, although it is anticipated that TVA will receive future Section 26a approval requests for the balance of the project. As indicated below, Section 26a requests for approvals would involve mitigation of site-specific stream and wetland impacts that were identified in the FHWA/TDOT EA. This would include stream crossings, culvert extensions or other

potential alterations to Carroll, Boones, Reedy, Possum, Cedar, and Sinking Creeks and other named and unnamed tributaries to South Fork Holston and Watauga Rivers (Boone and Fort Patrick Henry Reservoirs). Also, road construction would affect another small wetland area. Effects and mitigation for all wetland losses are also characterized in the FHWA/TDOT EA (also see Impacts Assessment Section in this FONSI). This FONSI evaluates effects of the entire project on environmental resources in the project impact area.

Alternatives

The FHWA/TDOT EA evaluates the environmental consequences of two alternatives, No Action and the Proposed Alternative. Under No Action, no widening or other improvement to the existing highway would be made other than routine maintenance activities. Existing and future traffic flow problems would worsen and difficulty accessing needed social, economic, education, and governmental functions in this part of Washington and Sullivan Counties would increase.

Under the Proposed Alternative, SR 36 from SR 381 to I-81 would be improved. Along the existing alignment of SR 36, TDOT would construct four 12-foot wide traffic lanes, a 12-foot wide center lane, curbs and gutters with shoulders; as well as a sidewalk and multiple-use path. Mitigation of wetland losses for the project will be achieved by the debiting of 0.6 acres of wetlands from available wetland credits at the Shady Valley Wetland Mitigation Bank. Mitigation for the stream impacts will be achieved by payment through the Tennessee-in-Lieu-Fee Program.

Public and Intergovernmental Review

On November 4, 1997, TDOT sent out initial coordination packages to several federal, state, and local agencies and officials. Replies to this coordination were received from several federal and state agencies. Comments generally indicated that the project would not have impacts on organizational programs, plans or objectives; and, with implementation of best management practices (BMPs) and other mitigative measures, would not have significant environmental effects. TDOT held a combined Corridor and Design Public Hearing on the proposed project on August 17, 1999, at the Indian Trail Middle School in Johnson City. At the meeting 216 people signed the attendance register. Several people were concerned about safety, continued availability of services, noise, property values and related issues. However, most attendees were supportive of the project and felt the expansion is needed to solve the traffic congestion, improve safety and capacity and provide for future growth along this route.

TVA was invited and accepted its role as a cooperating agency in the environmental review for this project. By letters dated December 9, 1997, and January 26, 1998, TVA offered comments to TDOT following reviews of the preliminary plans for the entire length of the proposed project.

Impacts Assessment

The EA prepared by the FHWA and TDOT assessed the impacts of proposed highway improvements for a 9.95-mile stretch of SR 36 in Washington and Sullivan Counties, Tennessee. TVA independently reviewed the impacts assessed in the FHWA/TDOT EA and confirmed its findings. There would be temporary and insignificant impacts on water quality, aquatic habitat, and minor and insignificant increases in noise levels associated with the project and its construction. The FEDERAL HIGHWAY NOISE PREDICTION MODEL was used to predict the 2020 peak-hour levels at thirteen (13)

EA and confirmed its findings. There would be temporary and insignificant impacts on water quality, aquatic habitat, and minor and insignificant increases in noise levels associated with the project and its construction. The FEDERAL HIGHWAY NOISE PREDICTION MODEL was used to predict the 2020 peak-hour levels at thirteen (13) representative sensitive receptors within the project area. Seven (7) of the sensitive receptors would experience noise levels approaching or exceeding the noise abatement criteria of 70 dBA (decibels measured on hourly weighted sound level) with or without the project. No location points would have more than moderate noise impacts when comparing increases in design year noise levels to existing levels. Therefore, this project would have little effect on the audible environment of the area. Because of added costs, means contrary to the project purpose and likelihood of success, measures considered to mitigate project related increases in noise levels were determined to be infeasible or impractical when compared to any limited noise attenuation they might offer.

Numerous streams would be affected by this project but impacts would be insignificant if TVA Standard Conditions 5a-e and 6a-i in its Section 26a permit are followed. Other than 2 small wetlands previously mentioned, no unique aquatic habitats were identified within the project area. Land use, recreation, aesthetics, air and geological impacts would be minimal. The Natural Resources Conservation Service found that the proposed project area contains no prime farmland. Socioeconomic impacts of the proposal are expected to be positive, but not significant.

For compliance with Executive Order 11988, culverts are considered to be repetitive actions in the floodplain. The project would comply with the requirements of the National Flood Insurance Program and be consistent with Executive Order 11988. TVA verified that Washington and Sullivan Counties and the cities of Johnson City (Washington County) and Kingsport (Sullivan County) participate in the National Flood Insurance Program (NFIP) and that construction would be consistent with NFIP requirements. Additionally, for purposes of the initial approval of section of SR 36 from SR 381 to SR 354, Paul L. Sharp, P.E., acting on behalf of TDOT, provided engineering "no-rise" certification assuring that the proposed plans and design data support the fact that bridge replacement over Boones Creek at mile 1.58 will not adversely impact the 100-year flood elevations, floodway elevations, and floodway widths.

By letters dated December 18, 1997, and January 29, 1998, the U.S. Fish and Wildlife Service (FWS) indicated that no federally listed or proposed endangered or threatened species were known to occur in the impact area of the project. Furthermore, FWS indicated that impacts on aquatic resources would be minimized by implementation of BMPs to effectively control erosion, sedimentation and other potential hazards.

A 0.7-acre wetland is located east of SR 36 near its intersection with Mountainview Road. About 0.1-acre of this wetland would be permanently affected. Another small wetland is located east of SR 36 where the creek draining from Stickler Hollow meets Fort Patrick Henry Reservoir. It covers about 0.2-acre, of which 0.1-acre would be permanently filled. Portions of these two separate, small wetlands totaling 0.029-acre near the southern and northern ends of the project would be destroyed. A total of 505 feet of stream would be impacted, including the loss of 96 linear feet through encapsulation, length losses and rip-rap. Mitigation of wetland losses for the project will be achieved by the debiting of 0.6-acre of wetlands from available wetland credits

at the Shady Valley Wetland Mitigation Bank. TVA has determined that there are no practicable alternatives to meet the purpose and need for this project. With mitigation mentioned above, the project would be consistent with Executive Order 11990 (Protection of Wetlands) and would not cause significant impacts to wetland resources or their values to the region. Stream impact mitigation will be provided by payment through the Tennessee-in-Lieu-Fee Program. On April 8, 2004, for portions of the project not meeting the criteria for the general permit, Tennessee Department of Environment and Conservation (TDEC) issued a conditional individual ARAP NRS04.022.

TDOT conducted an archaeological assessment of the proposed project including a literature review, records search and Phase I field survey. In consultation with the Tennessee State Historic Preservation Officer (SHPO), TDOT determined that there are no archaeological resources potentially eligible for listing on the National Register of Historic Places (NRHP). An historic survey identified one property, the Martin Kitzmiller House, on the NRHP. By letter dated November 18, 1998, the SHPO agreed that the project would not adversely affect this historic house. By letters dated August 11, 1998 and October 21, 1998, the SHPO concurred that no other properties in the area of potential effects meets the criteria for eligibility for listing and that the project would not adversely affect any historic properties. TDOT concurs that all borrow areas outside the right-of-way will require a separate certification as specified under Section 107.06, Tennessee Department of Standards, Federal Aid Provisions. SHPO, TDOT, and the Advisory Council on Historic Properties (ACHP), by letter dated December 18, 1998, agreed that no adverse effects would occur to historic properties during the implementation of the project.

Mitigation

Construction procedures shall be governed by TDOT <u>Standard Specifications for Road and Bridge Construction</u>. TDOT contractors will be responsible for compliance with Section 1007.01 of the standards to observe any noise ordinance in effect within the project limits. TDOT has expertise to effectively manage potential hazards associated with the possible presence of underground storage tanks. Further hazardous waste assessment work will be conducted as design plans are finalized. If hazardous substances are encountered, their general disposition shall be subject to applicable provisions of the Federal Resource Conservation and Recovery, Comprehensive Response, Compensation and Liability and Tennessee Hazardous Waste Management Acts, as amended.

This FONSI is contingent upon successful implementation of BMPs for erosion and sediment control (TVA Standard Conditions 5a-e and 6a-i). In its project authorization of January 29, 2004, the proposed work meets the USACE criteria of Nationwide Permit (NWP) #14. USACE authorized the fill of 0.029 acres of wetlands and 96 linear feet of stream impacts, including the realignment or alteration, for the southernmost section of the project. Along this portion of SR 36, it also authorizes bridge replacement and widening over Boones and Carroll Creeks. Mitigation for the permanent filling of portions of 2 small wetlands along the entire 9.95-mile route will be provided by the debiting, at a 2:1 ratio, of 0.6 acres of wetlands credits from available wetland credits at the Shady Valley Wetland Mitigation Bank. Mitigation for stream impacts, not mitigated onsite, will be provided by payment to the Tennessee Wildlife

Resources Foundation for the In-Lieu-Fee Stream Mitigation Bank Program. The proposed work must also be constructed in accordance with conditions included in the USACE NWP #14 and TDEC General Aquatic Resource Alteration Permits (ARAP). On April 8, 2004, TDEC issued a conditional individual ARAP for the southernmost portion of the project.

Conclusion and Findings

TVA has concluded that the FHWA/TDOT-prepared EA is adequate and the impacts on the environment and agency comments have been adequately addressed. TVA has decided to adopt the FHWA/TDOT EA. It is attached and incorporated by reference. TVA has determined that no threatened and endangered species would be affected by the entire SR 36 project. TVA has also evaluated the project for compliance with Executive Order 11988 on Floodplain Management. TVA has determined that no practicable alternative to widening the highway along the existing highway route is available due to the associated cost with relocating a highway. TVA has determined that its Section 26a approval actions along the entire route would result in no adverse effect to historic properties.

Based on the EA, we conclude that the Section 26a approvals under the TVA Act along the entire route would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required. This FONSI is contingent upon successful implementation of TVA General and Standard Conditions (5a-e and 6a-i) and the mitigation measures previously identified in the FHWA/TDOT EA and in the USACE NWP and TDEC general and individual ARAP.

Jon M. Loney

Manager, NEPA Administration Environmental Policy and Planning

Tennessee Valley Authority

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